



2123
#4
BT

12-12-02

PTO/SB/21 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	09/976,882
Filing Date	October 13, 2001
First Named Inventor	Gregory Scott Lett, et al.
Group Art Unit	2123
Examiner Name	Not yet assigned
Attorney Docket Number	4819-18

RECEIVED

DEC 10 2002

Technology Center 2100

ENCLOSURES (check all that apply)

- ☐ Fee Transmittal Form
- ☐ Fee Attached
- ☐ Amendment / Reply
- ☐ After Final
- ☐ Affidavits/declaration(s)
- ☐ Extension of Time Request
- ☐ Express Abandonment Request
- ☒ Information Disclosure Statement with 22 attached references
- ☐ Certified Copy of Priority Document(s)
- ☐ Response to Missing Parts/Incomplete Application
- ☐ Response to Missing Parts under 37 CFR 1.52 or 1.53

- ☐ Assignment Papers (for an Application)
- ☐ Drawing(s)
- ☐ Licensing-related Papers
- ☐ Petition
- ☐ Petition to Convert to a Provisional Application
- ☐ Power of Attorney, Revocation Change of Correspondence Address
- ☐ Terminal Disclaimer
- ☐ Request for Refund
- ☐ CD, Number of CD(s) _____

- ☐ After Allowance Communication to Group
- ☐ Appeal Communication to Board of Appeals and Interferences
- ☐ Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
- ☐ Proprietary Information
- ☐ Status Letter
- ☒ Other Enclosure(s) (please identify below):
Forms PTO/SB/08A (2 sheets) and PTO/SB/08B (1 sheet); Return receipt postcard.

Remarks

Customer Number 30551

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name

Leslie Gladstone Restaino, Reg. No. 38,893

Signature

Leslie Gladstone Restaino

Date

12/4/2002

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date: 12/4/02

Typed or printed name

Steven E. Halpern

Signature

St E Halpern

Date

12/4/02

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RECEIVED
DEC 10 2002
Technology Center 2100

In re Application of: Gregory Scott Lett, et al Docket No.: 1/0004
Serial No.: 09/976,882 Examiner: To be assigned
Filed: October 13, 2001 Group Art Unit: 2123
Title: **SYSTEM AND METHOD FOR MODELING BIOLOGICAL
SYSTEMS**

December 4, 2002

Commissioner of Patents
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §1.97(b)

Sir:

In accordance with the duty of disclosure under 37 CFR § 1.56, applicant hereby notifies the U. S. Patent and Trademark Office of the following documents, which are listed on the attached PTO/SB/08A and PTO/SB/08B forms. A copy of each of the documents is enclosed for the examiner's convenience.

In addition to the patents and publications enclosed herein, applicants also list the following computer programs which may be relevant to the subject application:

- (1) *Talis*, downloadable from <http://www.cds.caltech.edu/~hsauro/Talis/talis.htm>.
- (2) *NetWork*, downloadable from <http://urchin.spbcas.ru/tools.html>.

- (3) *SCAMP*, downloadable from
<http://www.cds.caltech.edu/~hsauro/Scamp/scamp.htm>.
- (4) *MetaModel*, downloadable from <http://bip.cnrs-mrs.fr/bip10/modeling.htm>.
- (5) *SCoP*, may be purchased from Simulation Resources, Inc., Redlands, CA,
<http://www.simresinc.com/>.
- (6) *MetaCon*, downloadable from
http://bmsmudshark.brookes.ac.uk/sware.html#Software_top.
- (7) *BioThermo*, [NO INFORMATION AVAILABLE]
- (8) *FluxMap*, previously available for purchase from Biotechnol SA, Oeiras, Portugal, <http://www.biotechnol.com/>; currently unavailable.
- (9) *BioNet*, available as part of the Cell Tissue and Reactor Engineering Short Course, University of Minnesota, <http://hugroup.cems.umn.edu/ctre/cd-rom/Contents.pdf>
- (10) *Matlab Simulink*, may be purchased from The Mathworks, Inc., Natick, MA,
<http://www.mathworks.com/>.
- (11) *Matlab Stateflow*, may be purchased from The Mathworks, Inc., Natick, MA,
<http://www.mathworks.com/>.

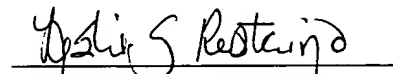
The submission of the listed documents is not intended as an admission that any of the documents constitutes prior art against the claims of the present application. Applicants do not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

Applicants respectfully request that the listed documents be considered by the examiner and be made of record in the present application and that an initialed copy of Forms PTO/SB/08A and PTO/SB/08B be returned in accordance with MPEP § 609.

It is understood that no fee is necessary for submission of this Information Disclosure Statement, as it is being filed before the later of three months from the filing date or the mailing of the first Office Action on the merits.

The Commissioner is hereby authorized to charge payment of any fees associated with this application or credit any overpayment to Deposit Account No. 02-4270.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Leslie Gladstone Restaino", is written over a horizontal line.

Leslie Gladstone Restaino

Reg. No. 38,893

Attorney for Applicants

BROWN RAYSMAN MILLSTEIN

FELDER & STEINER LLP

163 Madison Avenue

P.O. Box 1989

Morristown, New Jersey 07962-1989

(973) 775-8930

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 3

Complete if Known

Application Number	09/976,882
Filing Date	October 13, 2001
First Named Inventor	Gregory Scott Lett, et al.
Group Art Unit	2123
Examiner Name	Not yet assigned
Attorney Docket Number	01/0004

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

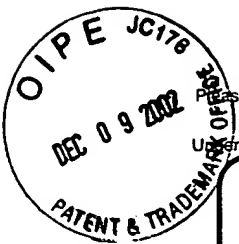
Examiner
Signature

Date
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.



Please type a plus sign (+) inside this box → ☐

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

PTO/SB/08B (08-00)
Approved for use through 10/31/2002. OMB 0651-0031

U. S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 2 of 3

Compleat if Known

Application Number	09/976,882
Filing Date	October 13, 2001
First Named Inventor	Gregory Scott Lett, et al
Group Art Unit	2123
Examiner Name	Not yet assigned
Attorney Docket Number	01/0004

RECEIVED

DEC 10 2002

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Technology Center 2100

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	9	SCHAFF, J. C., et al., "Physiological Modeling with Virtual Cell Framework," in Methods in Enzymology, Vol. 321, pp. 1-23, (M. Johnson & L. Brand, eds., Academic Press, 2000).	
	10	SCHAFF, J. and L. M. LOEW, "The Virtual Cell," Pacific Symposium on Biocomputing, Vol. 4, pp. 228-239 (1999).	
	11	FINK, C. C., et al., "An Image-Based Model of Calcium Waves in Differentiated Neuroblastoma Cells," Biophys. J., Vol. 79, pp. 163-183 (2000).	
	12	SCHAFF, J., et al., "A General Computational Framework for Modeling Cellular Structure and Function," Biophys. J., Vol. 73, pp. 1135-1146 (1997).	
	13	GORYANIN, I., et al., "Mathematical Simulation and Analysis of Cellular Metabolism and Regulation," Bioinformatics, vol. 15(9), pp. 749-758 (1999).	
	14	MENDES, P., & D. KELL, "Non-Linear Optimization Of Biochemical Pathways: Applications to Metabolic Engineering and Parameter Estimation," Bioinformatics, vol. 14(10), pp. 869-883 (1998).	
	15	MENDES, P., "Biochemistry By Numbers: Simulation of Biochemical Pathways with GEPASI 3," Trends. Biochem. Sci., vol. 22, pp. 361-363 (1997).	
	16	MENDES, P., & D. B. KELL, "On the Analysis of the Inverse Problem of Metabolic Pathways Using Artificial Neural Networks," BioSystems, vol. 38, pp. 15-28 (1996).	
	17	MENDES, P., "GEPASI: A Software Package for Modelling the Dynamics, Steady States and Control of Biochemical and Other Systems," Comput. Appl. Biosci., vol. 9(5), pp. 563-571 (1993).	
	18	HINES, M., "NEURON: A Program for Simulation of Nerve Equations," in "Neural Systems: Analysis and Modeling" (F. Eeckman, ed., Kluwer Academic Publishers, 1993).	
	19	BOWER, J. M., & D. BEEMAN, "The Book of GENESIS: Exploring Realistic Neural Models with the General Neural Simulation System," Chapters 1-3 and 10-12 (2nd ed., Springer-Verlag, New York, 1998).	

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.